Faculty of Information and Communication Technology

ITCS212 Web Programming

L08: Node.js (Part I)

Instructions:

- Please download **L08.zip** for the template and the files used for this exercise.

- There are 1 question to be submitted. Student must submit to LAs or instructors prior to MyCourses

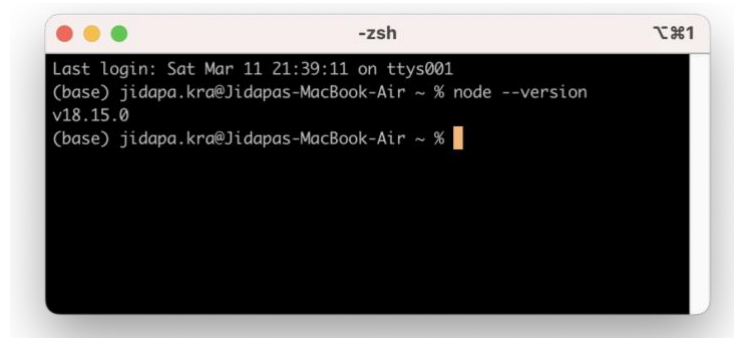- If students cannot finish within the class time, students can submit until the end of the semester.

==You must install Node.js prior to this question.==

Get Node.js Installed

- Download the latest Node.js LTS version from https://nodejs.org/en/ and install the program.

- Check the version of your Node.js by the command line:

```
node --version
```

If Node.js is installed correctly, the terminal should show the current version as followed:

Build the Server in Node.js

You are required to create the server using Node.js HTTP module. The following steps are needed to set up your working directory:

1. Create the directory, named `Lab08-XX88XXX`
2. Download `L08.zip` from MyCourses and extract the files to the directory in Step 1
3. Open Visual Studio Code and click "Open Folder" to browse the directory created in Step 1
4. Create an empty JS file, named `Lab08-XX88XXX.js`, which will be used to store your script.

After setting up (Step 1-4), your directory should have the following structure:

```
Lab08-XX88XXX                   (root)
       |_ Lab08-XX88XXX.js    (main JS file)
       |_ search.html
       |_ error.html
```
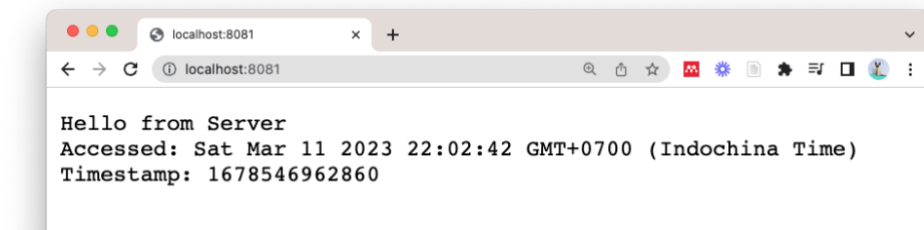
The **requirements of the server** from HTTP module are:

- Server will be run on localhost at the port 8081
- Server will handle the following requests with the proper responses, including:
  - When there are requests coming at the **root** (i.e., `'/'`), the server will respond with the greeting message in the plain text showing the current date, time, and the timestamp.

    Expect output

    http://localhost:8081/

    ```
    (base) <PATH to YOUR PROJECT> % node L08-XX87XXX.js
    Listening on the port 8081
    Req: /
    ```
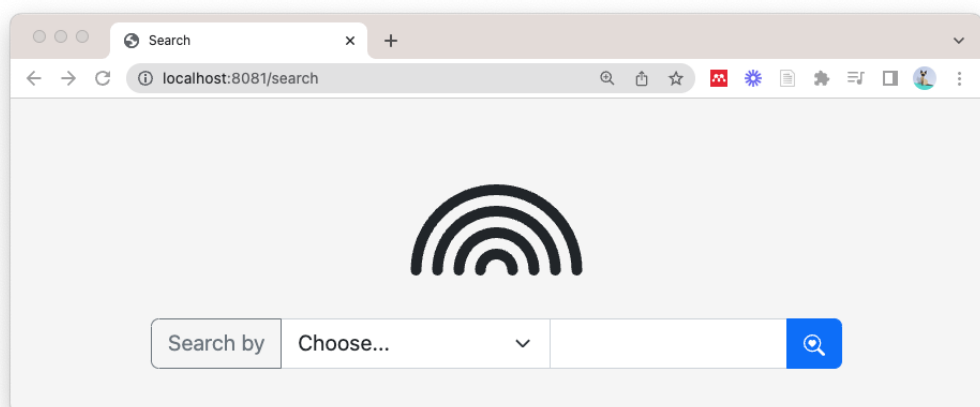
  - When there are requests coming at `'/search'`, the server will respond with search.html (statusCode=200 OK)

    Expect output

    http://localhost:8081/search

    ```
    (base) <PATH to YOUR PROJECT> % node L08-XX87XXX.js
    Listening on the port 8081
    Req: /search
    ```
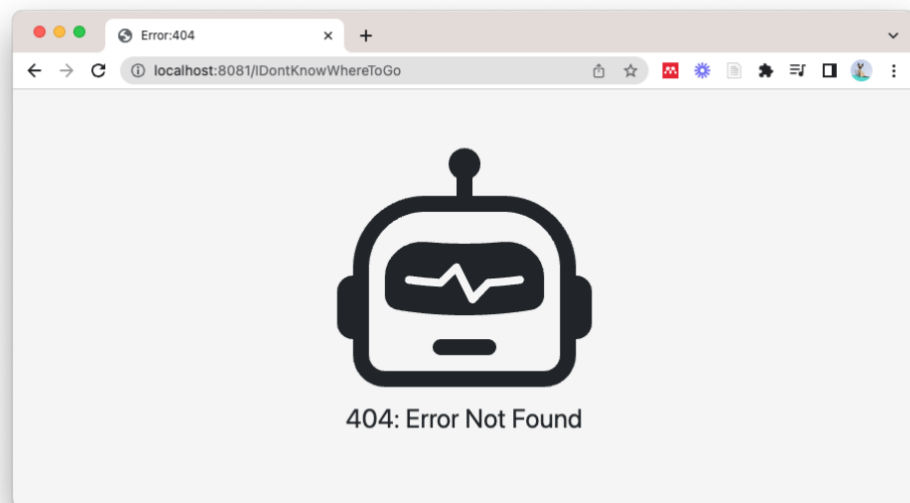
○ When there are requests coming at other paths not declared above, the server will

respond with `error.html` (`statusCode=404     Not Found`)

Expect output

`http://localhost:8081/IDontKnowWhereToGo`

```
(base) <PATH to YOUR PROJECT> % node L08-XX87XXX.js
Listening on the port 8081
Req: /IDontKnowWhereToGo
```


404: Error Not Found

Submission:

- Student must submit to LAs or instructors prior to submit the file to MyCourses
- Submit only JS file, named **`Lab08-XX88XXX.js`**. Please check your submission to make sure it is runnable.